## **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-022131 Address: 333 Burma Road **Date Inspected:** 23-Mar-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Mr. Liu hua jie No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A Weld Procedures Followed: N/A **Electrode to specification:** No Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** Orthotropic Box Girder (OBG)

#### **Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

OBG Trial Assembly open yard.

Segment:13AE

This QA Inspector randomly observed the following work in progress:

Shielded Metal Arc Welding (SMAW) welding of weld joint identified as SEG3007AD-038. Welder is identified as 037743. ZPMC Quality Control (QC) is identified as Mr. Liu hua jie. The welding variables recorded by QC personnel observed appeared to comply with Welding Procedure Specification (WPS): WPS-B-P-2214-TC-U4b-FCM-1.

Flux Cored Arc Welding (FCAW) welding of weld joint identified as SEG3007S-147,151. Welder is identified as 050242. ZPMC QC is identified as Mr. Liu hua jie. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-B-T-2233-ESAB.

SMAW repair welding of weld joint identified as SEG3007P-186,207. Welder is identified as 200113. ZPMC QC

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is identified as Mr. Liu hua jie. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-345-SMAW-3G (3F)-FCM-repair-1. The repair welding was being performed as per Welding Repair Report (WRR) No: B-WR20396.

SMAW repair welding of weld joint identified as SEG3007H-010. Welder is identified as 066418. ZPMC QC is identified as Mr. Liu hua jie. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-345-SMAW-3G (3F)-FCM-repair-1. The repair welding was being performed as per WRR No: B-WR20472.

Segment:13AW

SMAW welding of weld joint identified as SEG3013A-009. Welder is identified as 069683. ZPMC QC is identified as Mr. Shen jian bo. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-B-P-2214-B-U2-FCM-1.

SMAW welding of weld joint identified as SEG3013A-009. Welder is identified as 069683. ZPMC QC is identified as Mr. Shen jian bo. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-B-P-2214-B-U2-FCM-1.

FCAW welding of weld joint identified as SEG3013S-172,168. Welder is identified as 048433. ZPMC QC is identified as Mr. Liu hua jie. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-B-T-2233-ESAB.

ZPMC personnel performing air-carbon arc gouging on the I rib stiffener plate weld joints identified as SEG3013-173,176,178,181,186,188,191,193 and 196 at Panel point 118.35 counter weight side. See attached photos for further details.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





#### **Summary of Conversations:**

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No significant conversations were reported on this date.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhu,Surendra	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer